Pop Quiz 9
November 10, 2003
5 Points

1. TRUE OR FALSE: There can be no collisions in a hash table that has 11 slots and that contains 8 records.

2. Define any hash function on integers for a table of size 13.

3. TRUE OR FALSE: In closed hashing, every record in the hash table is in its own slot.

4. TRUE OR FALSE: In open hashing, search for key $k$ continues until key $k$ is found or an empty slot is found.

5. TRUE OR FALSE: Bucket hashing is more suited to a hash table on disk than one in RAM.
Solutions to Pop Quiz 9

1. There can be no collisions in a hash table that has 11 slots and that contains 8 records. FALSE. (TRUE is also accepted due to English-language ambiguity in the sentence.)

2. \( h(x) = x \pmod{13} \) is such a hash function because it returns an integer between 0 and 12.

3. In closed hashing, every record in the hash table is in its own slot. TRUE.

4. In open hashing, search for key \( k \) continues until key \( k \) is found or an empty slot is found. FALSE.

5. Bucket hashing is more suited to a hash table on disk than one in RAM. TRUE.